DM-RMC-100-C

DigitalMedia 8G+™ Receiver & Room Controller 100

The DM-RMC-100-C provides a simple one-box interface solution for a single display device as part of a complete Crestron® DigitalMedia™ system. It functions as a DM 8G+ receiver and control interface, providing a single HDMI® output along with Ethernet, RS-232, and IR control ports. Its compact, low-profile design allows the DM-RMC-100-C to be installed discreetly behind a flat panel display or above a ceiling mounted projector. It connects to the head end or source location using a single CAT5e or Crestron DM 8G™ cable.[1]

DigitalMedia 8G+™

As the leader in HDMI and control system technologies, Crestron developed DigitalMedia to deliver the first complete HD AV distribution system to take HDMI to a higher level. DigitalMedia allows virtually any mix of AV sources to be distributed throughout the home, office, school, or virtually any other facility.

DigitalMedia 8G+ breaks even further ground, providing a true one-wire transport for moving high-definition video, audio, and Ethernet over low-cost twisted-pair cable without any need for compression or repeaters. Just one 8-conductor twisted-pair cable is required, supporting distances up to 330 feet (100 m) using Crestron DM 8G Cable or CAT5e.[1]

DigitalMedia thoughtfully manages all of the various AV signals and devices in your system, matching each source's output to the capabilities of the selected display(s). Every signal is preserved in its native video resolution and audio format, ensuring a pure, lossless signal path throughout.

Multimedia Display Interface

A single HDMI digital AV output port is provided on the DM-RMC-100-C, supporting HDMI with HDCP, Deep Color and 3D, handling 1080p60 HDTV with multi-channel HD lossless audio as well as WUXGA computer resolutions — all through a single connection. The HDMI output can also handle DVI signals using an appropriate adapter or interface cable[2]. In addition, there are RS-232, IR, and Ethernet control ports provided for controlling the display device and other equipment.

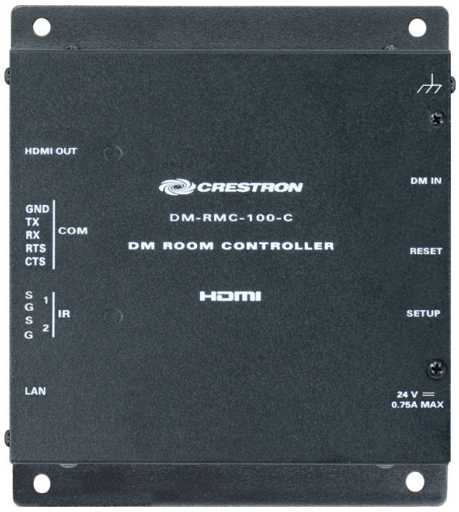
A single cable connects the DM-RMC-100-C to a DM® switcher or transmitter, transporting video, audio, control, networking, and power signals all through one simple RJ45 connection.[1,3] Multiple DM-RMC-100-Cs may be installed to handle each display in a multi-room distribution system, all fed from a central DM-MD series switcher. Or, a single DM-RMC-100-C can be fed straight from a DM 8G+ transmitter, affording a very simple solution for extending a computer or AV signal to a single display.

LAN Connectivity

Along with high-definition AV and control, DigitalMedia also integrates high-speed Ethernet networking for a total signal distribution solution. The DM-RMC-100-C includes a 10/100 Ethernet port, providing a convenient LAN connection for a local network device.

Embedded Device Control

The primary objective of every Crestron system is to enable precisely the control desired for a seamless user experience. The DM-RMC-100-C includes built-in RS-232, IR, and Ethernet control ports to allow programmable control of the display device connected to it. But, it can also provide an alternative to these conventional control methods by harnessing the CEC (Consumer Electronics Control) signal embedded



in HDMI. Through its connection to the control system, the DM-RMC-100-C provides a gateway for controlling the display device right through the HDMI connection, potentially eliminating the need for any dedicated control wires or IR probes.

Low-Profile Installation

The DM-RMC-100-C mounts conveniently to a wall, ceiling, or other flat surface. At just one inch deep, it fits easily behind a flat panel display or above a ceiling-mounted projector. All connections and LED indicators are positioned on the sides, ensuring optimal access and visibility for a clean, serviceable installation. An array of indicators is provided for easy setup and troubleshooting.

*Please refer to the DigitalMedia Resources Webpage at http://www.*crestron.com/dmresources/ for additional design tools and reference documents.

- *> DigitalMedia 8G+™ receiver and display controller*
- *> Low-profile surface mount design*
- *> DM 8G+™ input supports up to 330 ft cable length[1]*
- *> Provides one HDMI® or DVI display output[2]*
- *> Handles HD video with Deep Color and 3D*
- *> Enables device control via CEC, RS-232, IR, or Ethernet*
- *> Can be powered via DM or a local power pack[3]*
- *> Affords a true one-wire connection to a DM® switcher or transmitter*
- *> Provides a 10/100 Ethernet connection*
- *> Allows quick, easy setup and diagnostics*

DM-RMC-100-C

SPECIFICATIONS

Video

Input Signal Type: DM 8G+ (DigitalMedia over one CAT5e twisted-pair copper wire)[1]
Output Signal Types: HDMI®, DVI[2]
Formats: HDMI w/Deep Color & 3D, DVI, HDCP content protection support
Input Resolutions, Progressive: 640x480@60Hz, 720x480@60Hz (480p), 720x576@50Hz (576p), 800x600@60Hz, 848x480@60Hz, 852x480@60Hz, 854x480@60Hz, 1024x768@60Hz, 1024x852@60Hz, 1024x1024@60Hz, 1280x720@50Hz (720p50), 1280x720@60Hz (720p60), 1280x768@60Hz, 1280x800@60Hz, 1280x960@60Hz, 1280x1024@60Hz, 1360x768@60Hz, 1365x1024@60Hz, 1366x768@60Hz, 1400x1050@60Hz, 1440x900@60Hz, 1600x900@60Hz, 1600x1200@60Hz, 1680x1050@60Hz, 1920x1080@24Hz (1080p24), 1920x1080@25Hz (1080p25), 1920x1080@50Hz (1080p50), 1920x1080@60Hz (1080p60), 1920x1200@60Hz, 2048x1080@24Hz, 2048x1152@60Hz, plus any other resolution allowed by HDMI up to 165MHz pixel clock
Input Resolutions, Interlaced: 720x480@30Hz (480i), 720x576@25Hz (576i), 1920x1080@25Hz (1080i25), 1920x1080@30Hz (1080i30), plus any other resolution allowed by HDMI up to 165MHz pixel clock
Output Resolutions: Matched to input

Audio

Input Signal Type: DM 8G+
Output Signal Type: HDMI
Formats: Dolby Digital®, Dolby Digital EX, Dolby Digital Plus, Dolby® TrueHD, DTS®, DTS-ES, DTS 96/24, DTS-HD High Res, DTS-HD Master Audio™, Up to 8ch PCM

Communications

DigitalMedia: DM 8G+, HDCP management, EDID format management, CEC
Ethernet: 10/100 Mbps, auto-switching, auto-negotiating, auto-discovery, full/half duplex, TCP/IP, UDP/IP, CIP, DHCP, RSTP

Connectors

HDMI OUT: (1) 19-pin Type A HDMI female;
HDMI digital video/audio output;
Also supports DVI[2]
COM: (1) 5-pin 3.5mm detachable terminal block, bidirectional RS-232 port;
Up to 115.2k baud, hardware and software handshaking support

IR 1 - 2: (1) 4-pin 3.5mm detachable terminal block comprising (2) IR/Serial ports;
IR output up to 1.1 MHz;
1-way serial TTL/RS-232 (0-5 Volts) up to 19200 baud

LAN: (1) 8-wire RJ45 female, shielded;
10BaseT/100BaseTX Ethernet port
Ground: (1) 6-32 screw, chassis ground lug
DM IN: (1) 8-pin RJ45 female, shielded;
DM 8G+ input, accepts power over DM[3];
Connects to DM 8G+ output of a DM switcher, transmitter, or other DM device via CAT5e or Crestron DM-CBL-8G cable[1]
24VDC 0.75A MAX: (1) 2.1mm barrel DC power jack;
24 Volt DC power input;
PW-2407WU power pack included

Controls & Indicators

HDMI OUT: (1) green LED, indicates video signal presence at the HDMI output
LAN: (2) LEDs, green LED indicates Ethernet link status, amber LED indicates Ethernet activity
DM IN: (2) LEDs, green LED indicates DM link status, amber LED indicates video and HDCP signal presence
RESET: (1) miniature recessed pushbutton, for hardware reset

Note: May be powered via power pack or DM, not both.

Environmental

Temperature: 32° to 104°F (0° to 40°C)
Humidity: 10% to 90% RH (non-condensing)
Heat Dissipation: 29 BTU/Hr

Enclosure

Chassis: Metal, black finish, with (2) integral mounting flanges, vented top and bottom
Mounting: Freestanding, surface mount, or attach to a single rack rail

Dimensions

Height: 6.09 in (155 mm)
Width: 5.63 in (143 mm)
Depth: 1.02 in (26 mm)

Weight

16.5 oz (468 g)

Available Models

DM-RMC-100-C: DigitalMedia 8G+™ Receiver & Room Controller 100

Included Accessories

PW-2407WU Wall Mount Power Pack 24VDC, 0.75A, Universal [Included Quantity: 1]

Available Accessories

DM-CBL-8G-NP-SP500: DigitalMedia 8G™ Cable, non-plenum, 500 ft spool
DM-CBL-8G-P-SP500: DigitalMedia 8G™ Cable, plenum, 500 ft spool
DM-8G-CONN-100: DigitalMedia 8G™ Cable Connector, 100-Pack
DM-8G-CRIMP: Crimping Tool for DM-8G-CONN
CBL-HD-1.5: Crestron® Certified HDMI® Interface Cable, 1.5 ft
CBL-HD-3: Crestron® Certified HDMI® Interface Cable, 3 ft
CBL-HD-6: Crestron® Certified HDMI® Interface Cable, 6 ft
CBL-HD-12: Crestron® Certified HDMI® Interface Cable, 12 ft
CBL-HD-20: Crestron® Certified HDMI® Interface Cable, 20 ft
CBL-HD-30: Crestron® Certified HDMI® Interface Cable, 30 ft
CBL-HD-DVI-1.5: Crestron® Certified HDMI® to DVI Interface Cable, 1.5 ft
CBL-HD-DVI-3: Crestron® Certified HDMI® to DVI Interface Cable, 3 ft
CBL-HD-DVI-6: Crestron® Certified HDMI® to DVI Interface Cable, 6 ft
CBL-HD-DVI-12: Crestron® Certified HDMI® to DVI Interface Cable, 12 ft
CBL-HD-DVI-20: Crestron® Certified HDMI® to DVI Interface Cable, 20 ft
CBL-HD-DVI-30: Crestron® Certified HDMI® to DVI Interface Cable, 30 ft
MP-WP152-A: Media Presentation Wall Plate - HDMI®, Almond [Available June, 2011]
MP-WP152-B: Media Presentation Wall Plate - HDMI®, Black
MP-WP152-W: Media Presentation Wall Plate - HDMI®, White
MP-WP140-A: Media Presentation Wall Plate - DVI-I w/Mini-TRS Stereo Audio, Almond [Available June, 2011]
MP-WP140-B: Media Presentation Wall Plate - DVI-I w/Mini-TRS Stereo Audio, Black
MP-WP140-W: Media Presentation Wall Plate - DVI-I w/Mini-TRS Stereo Audio, White
MP-WP181-C-A: Media Presentation Wall Plate - Crestron DigitalMedia 8G+™, Almond [Available June, 2011]
MP-WP181-C-B: Media Presentation Wall Plate - Crestron DigitalMedia 8G+™, Black [Available June, 2011]
MP-WP181-C-W: Media Presentation Wall Plate - Crestron DigitalMedia 8G+™, White [Available June, 2011]
MPI-WP150-120: Media Presentation Wall Plate - International Version - HDMI® w/Mini-TRS Stereo Audio, White [Available July, 2011]

MPI-WP181-C-120: Media Presentation Wall Plate - International Version - Crestron DigitalMedia 8G+™, White [Available July, 2011]
MPI-WP181-C-122: Media Presentation Wall Plate - International Version - Crestron DigitalMedia 8G+™, Anthracite [Available July, 2011]
CNSP-XX: Custom Serial Interface Cable
IRP2: IR Emitter Probe w/Terminal Block Connector

Notes:
1. For DM 8G+ wiring up to 330 ft (100 m) between devices, use Crestron DM-CBL-8G DigitalMedia 8G Cable or generic CAT5e (or better) UTP or STP. Or, use Crestron DM-CBL DigitalMedia Cable or DM-CBL-D DigitalMedia D Cable for wiring distances up to 200 ft (61 m). Refer to DM 8G Cabling Options, Doc. #4561 for all wiring alternatives, and the Crestron DigitalMedia Design Guide, Doc. #4789 for complete wiring guidelines. All cable sold separately.

2. HDMI requires an appropriate adapter or interface cable to accommodate a DVI signal. CBL-HD-DVI interface cable available separately.

3. Power over DM requires connection to a DM 8G+ power sourcing device.

This product may be purchased from an authorized Crestron dealer. To find a dealer, please contact the Crestron sales representative for your area. A list of sales representatives is available online at www.crestron.com/salesreps or by calling 800-237-2041.

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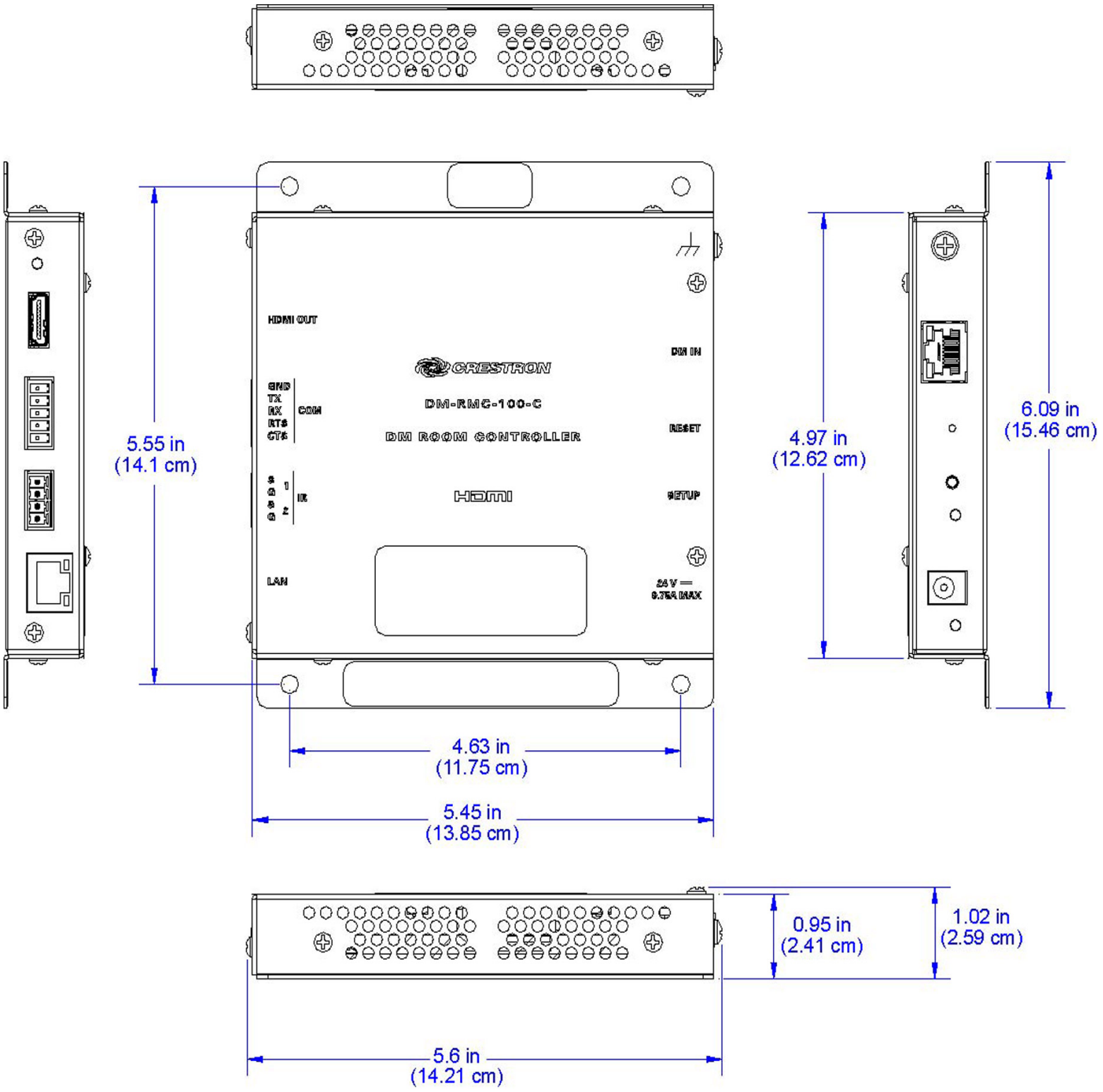
DM-RMC-100-C



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